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(71) Applicant: **APOLLO COMPUTER INC.**
330 Billerica Road
Chelmsford Massachusetts 01824(US)

(72) Inventor: **Stumpf, Bernard**
50 Acton Road
Chelmsford Massachusetts 01824(US)
Inventor: **Stabler, George M.**
43 Raymond Street
Nashua New Hampshire 03060(US)
Inventor: **Bahr, Richard G.**
16 Soden Street No.3
Cambridge Massachusetts 02139(US)
Inventor: **Ciavaglia, Stephen J.**
23 MacDonald Drive
Nashua New Hampshire 03062(US)
Inventor: **Flahive, Barry J.**
2 Parker Circle
Westford Massachusetts 01886(US)
Inventor: **Lauer, Hugh**
69 Border Road
Concord Massachusetts 01742(US)

(74) Representative: **Arthur, Bryan Edward et al**
Withers & Rogers 4 Dyer's Buildings Holborn
London EC1N 2JT(GB)

(54) **Method and apparatus for bus lock during atomic computer operations.**

(57) A computer system having a plurality of processors sharing common memory and data bus structures and operable to perform atomic operations which comprise several instruction actions, wherein the processor performing the atomic operation prevents memory access interruptions by other processors by locking out other processors during the atomic operation. The system bus includes signal paths accommodating bus lock request and bus lock signals which are provided and received by each processor, which signals are initiated by specific bus lock and lock release instructions added to each processor instruction set.

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EUROPEAN SEARCH REPORT

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EP 89 31 0980

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	EP-A-0 130 593 (HONEYWELL INFORMATION SYSTEMS INC.) * Page 2, lines 9-16; page 3, line 19 - page 4, line 14; pages 7-8; page 28, lines 13-21; page 29, line 5 - page 30, line 8; figures 1,9 *	1-4	G 06 F 13/36 G 06 F 13/16 G 06 F 15/16
A	---	5-6	
X	GB-A-2 044 499 (DEC) * Page 1, lines 85-115; page 3, lines 32-95; figure 1; claims 1-3 *	1-4	
A	---	5,6	
X	EP-A-0 094 841 (WESTERN ELECTRIC CO., INC.) * Page 3, line 20 - page 4, line 17; page 4, line 28 - page 5, line 26; figure 2 *	1,3	
A	---	2,4-6	
A	GB-A-2 188 177 (HITACHI LTD) -----	1-6	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G 06 F 9/46 G 06 F 13/36
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		23 May 91	NGUYEN XUAN HIEP C.
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document			